



SECO Update Programs and Activities

Dub Taylor, Director
State Energy Conservation Office (SECO)

About SECO

Mission Statement: "to increase the efficient use of energy and water while protecting the environment"

- ❖ One of 56 state/territory "energy offices"
- ❖ Support for public-sector energy and water efficiency project implementation
 - ❖ Technical assistance
 - ❖ Project financing
 - ❖ Education and training
- ❖ Codes and standards adoption (energy/water)
- ❖ US DOE state level administrator
 - ❖ State Energy Program (SEP)
 - ❖ Pantex/Waste Isolation Pilot Plant (WIPP)

www.seco.cpa.state.tx.us



State Energy Conservation Office

About This Site | Contact Us

"Energy Efficiency: Texas' Newest Energy Resource."

 **Glenn Hegar** Texas Comptroller of Public Accounts

Site Search

Home | Energy Efficiency | Funding & Incentives | SECO Programs | Resources

SECO partners with Texas consumers, businesses, educators and local governments to reduce energy costs and maximize efficiency.

Targeted Tips and Tools:

Residential Consumers



State and Local Government



Business and Industry



Schools and Teachers







Sign Up for
Energy
News &
Updates

Reporting

Submit Energy
Report to SECO >>

Texas Building
Energy Code

Online 2015 IECC training >>



[Texas.gov](#) | [Statewide Search from the Texas State Library](#) | [Texas Transparency](#) | [Texas Homeland Security](#)

Glenn Hegar, Texas Comptroller • [Comptroller.Texas.Gov](#)

[Privacy and Security Policy](#) | [Accessibility Policy](#) | [Link Policy](#) | [Public Information Act](#) | [Texas Veterans Portal](#) | [Compact with Texans](#)

"Energy Efficiency: Texas' Newest Energy Resource."



Glenn Hegar Texas Comptroller of Public Accounts

Site Search

[Home](#)[Energy Efficiency](#)[Funding & Incentives](#)[SECO Programs](#)[Resources](#)[Residential Consumers](#)[State and Local Governments](#)[Business and Industry](#)[Schools and Teachers](#)

Funding and Incentives

SECO Funding Opportunities

[Request for Proposal](#)

Posted Dec. 2, 2016 — SECO invites proposals from qualified individuals and independent firms to provide professional energy engineering services for SECO's LoanSTAR Revolving Loan Program. **Proposals due: Jan. 6, 2017.**

Other Funding Resources

[Federal & State Incentives for Renewables and Efficiency](#)

The [Database of State Incentives for Renewable Energy](#) (DSIRE) gives information on state and federal efficiency incentives by state, technology type, and incentive type with links to program websites, legislation, tax credits and deductions, rebates, grants, low-interest loans, property and sales tax exemptions, and bond programs.

[Renewable Energy Texas Tax Code Incentives](#)

Although the state does not have a program at this time that provides funding of renewable energy equipment on an individual basis, there are tax exemptions available in certain instances. For example businesses that either use or manufacture or install solar or wind energy can receive franchise tax deductions and/or exemptions. There also exists a property tax exemption involving solar, wind, biomass, and anaerobic digestion for business installation or construction of such systems.

[Financing Energy Upgrades for K-12 School Districts](#)

This guide focuses on clean energy financing options for school administrators, facility managers, and other K-12 school decision makers who are considering investments in high performance school projects. This guide explicitly focuses on comprehensive energy upgrades, those that involve multiple measures and are targeted toward achieving significant energy savings.



Sign up to receive Funding and
Incentives e-mail updates

Required Plug-ins [[Adobe Reader](#)]

[Texas.gov](#) | [Statewide Search from the Texas State Library](#) | [Texas Transparency](#) | [Texas Homeland Security](#)

Glenn Hegar, Texas Comptroller • [Comptroller.Texas.Gov](#)

[Privacy and Security Policy](#) | [Accessibility Policy](#) | [Link Policy](#) | [Public Information Act](#) | [Texas Veterans Portal](#) | [Compact with Texans](#)

15th Anniversary - SB5/TERP

Why?

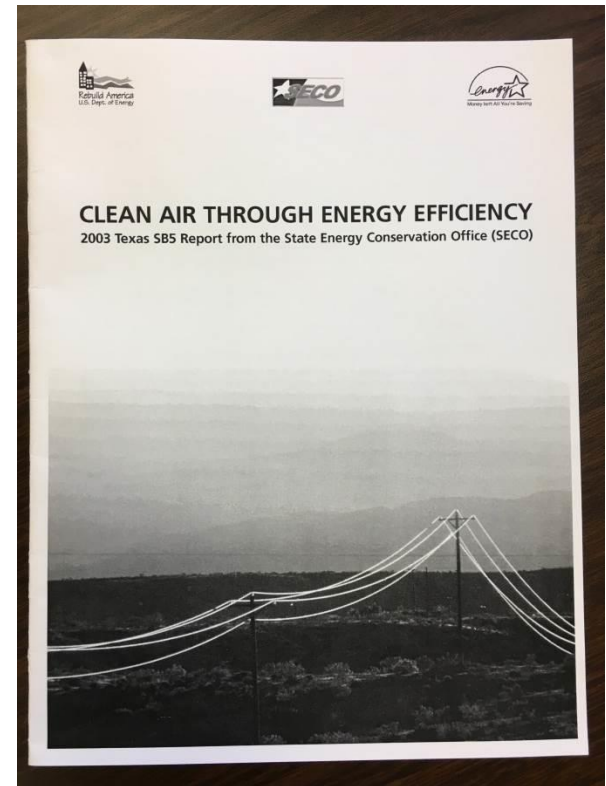
- (1) assure that the air in this state is safe to breathe and meets minimum standards established under the federal Clean Air Act
- (2) develop multipollutant approaches to solving the state's environmental problems
- (3) adequately fund research and development that will make the state a leader in new technologies that can solve the state's environmental problems while creating new business and industry in the state

Who...



TERP – Local Government/Agency EE

- ❖ Reduce electric usage 5%
- ❖ Report to SECO
 - ❖ goal/efforts/progress
 - ❖ through 2021(3rd update)
- ❖ SECO technical assistance
- ❖ Emissions impact - ESL



Technical Assistance

Preliminary Energy Assessments

- ❖ Eligibility: K-12 schools, cities, counties, special districts
- ❖ Process: PEA Service Agreement - utility bill analysis, interviews, site visits
- ❖ Recommendations: low/no-cost/maintenance, commissioning/optimization, capital projects, energy management policies

Remote Energy Audits/Assessments (coming in 2017)

- ❖ Via smart meter data and other public records – screening analysis/triage

City Efficiency Leadership Council

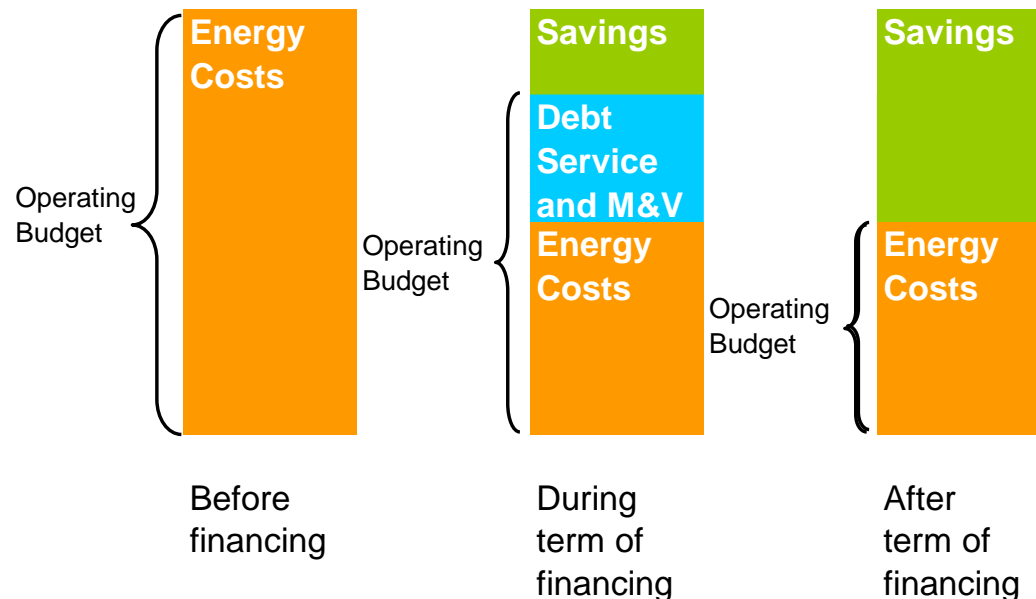
- ❖ Coordination and best practice sharing among the six largest cities in Texas
 - ❖ Fort Worth, Dallas, Houston, El Paso, Austin, San Antonio

US DOE Better Buildings Accelerator: Wastewater Infrastructure

- ❖ Catalyze the adoption of innovative and best-practice approaches in data management, technologies, and financing for infrastructure improvement
- ❖ Seek to improve the energy efficiency of participating water resource recovery facilities by at least 30 percent and integrate at least one resource recovery measure

LoanSTAR (Saving Taxes And Resources)

- ❖ Low interest revolving loan program that finances energy and water efficiency projects for public facilities
- ❖ Loan terms: 1-2% interest; 10-15 year simple payback
- ❖ \$214 million loan fund capitalized with the State funds (\$128 million) and Federal SEP funds (\$86 million)
- ❖ Self-servicing debt – borrowers repay loans through savings/avoided costs



LoanSTAR Impact

Executed 273 loans totaling \$373,137,181

Avoided Costs/Savings(\$): \$522,285,154

Average project \$ savings: 18.53%

Total Emission Savings to Date (1990-2016)

- ❖ NOx reductions: 14,721 tons
- ❖ SO2 reductions: 10,917 tons
- ❖ CO2 reductions: 5,015,002 tons
- ❖ Hg reductions: .07 tons

LoanSTAR Projects

City of San Antonio

- LED traffic/pedestrian signal conversion
- \$1.6 MM loan / \$879K annual savings / 1.9 yr ROI

Alamo CCD (6 campuses)

- Lighting, HVAC, solar pool heating, thermal storage
- \$5MM loan, \$500K annual savings, 10 yr ROI

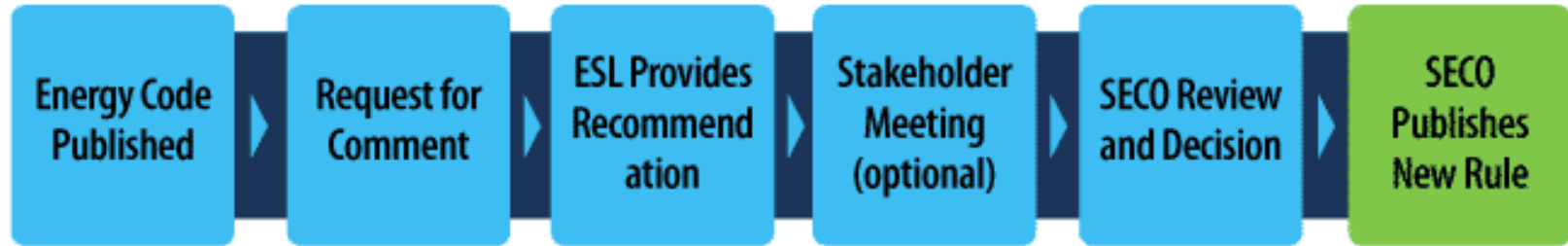
Brooks Development Authority

- Lighting, HVAC, controls
- \$1.9 MM loan, \$205K annual savings, 9.5 yr ROI

Devine ISD

- Lighting, EMS, vending and computer power mgmt
- \$780K loan, \$95K annual savings, 8.2 yr ROI

Codes and Standards



Single-Family Construction

- **2015** International Residential Code , Chapter 11 - **Effective Sep. 1, 2016**

Multi-Family Residential Construction

- **2015** International Energy Conservation Code - **Effective Nov. 1, 2016**

Commercial Construction

- **2015** International Energy Conservation Code - **Effective Nov. 1, 2016**
-

State-Funded Buildings

- new state-funded buildings or state-funded major renovation projects including state-supported institutions of higher education
 - ASHRAE 90.1 2013 or the 2015 International Energy Conservation Code - **Effective June 1, 2016**
 - Texas Water Conservation Standards - **Effective June 1, 2016**

Education and Training

Texas Energy Education Project

Multi-year STEM energy supplement targeted to middle and high school students

- ❖ Phase 1: in FY 2016, the first three units were developed
 - ❖ Energy Resources - serves as an introduction to the course and will address the basics—What is Energy? What are the Forms of Energy?
 - ❖ Energy Efficiency Economics - looks more specifically at examples of energy resources currently available and explores their costs and benefits.
 - ❖ Energy in Your State - explores in depth the energy resources that are abundant in Texas

Solar Training for Local Governments

- ❖ Fire Inspector Training & Fire Code Compliance for Solar Energy Systems
- ❖ Solar for Local Governments
- ❖ Solar PV for Real Estate Professionals
- ❖ Financing Solar Energy Systems

2015 IECC Residential & Commercial Energy Code Updates Workshops

ASHRAE 90.1 2013 Workshops

Questions?

Find me at the reception...

Dub Taylor, Director
State Energy Conservation Office
dub.taylor@cpa.state.tx.us

Also here: Eddy Trevino, Fred Yebra, Stephen Ross

www.seco.cpa.state.tx.us

